

AMENDMENTS TO THE CLAIMS:

1. (Previously presented) A light branching apparatus, comprising:
an optical splitter which splits an optical signal for a plurality of channels on a first optical fiber into at least a first optical channel signal on a first channel of a second optical fiber and a plurality of second optical channel signals on a plurality of second channels of a third optical fiber; and
a first wavelength dispersion compensator on said second optical fiber which is provided for said first channel and compensates wavelength dispersion of said first optical channel signal due to said optical splitter.
2. (Original) The light branching apparatus according to claim 1, further comprising:
a second wavelength dispersion compensator which is provided for said plurality of second channels and compensates wavelength dispersion of said plurality of second optical channel signals due to said optical splitter.
3. (Previously presented) The light branching apparatus according to claim 1, wherein said first wavelength dispersion compensator compensates wavelength dispersion of said first optical channel signal due to said second optical fiber, and said wavelength dispersion of said first optical channel signal due to said optical splitter.
4. (Previously presented) The light branching apparatus according to claim 3, wherein said first wavelength dispersion compensator compensates said wavelength dispersion of said first optical channel signal due to said second optical fiber by a difference in length between said second optical fiber and said third optical fiber on which said first optical channel signal is selectively propagated.
5. (Original) The light branching apparatus according to claim 4, further comprising:
an optical switch which switches a channel from one of said plurality of second channels to said first channel.

6. (Previously presented) The light branching apparatus according to claim 1, further comprising:

a third wavelength dispersion compensator which is provided for said first channel and compensates wavelength dispersion of said first optical channel signal due to said second optical fiber.

7. (Previously presented) The light branching apparatus according to claim 1, further comprising:

a fourth wavelength dispersion compensator which is provided for a third channel of said second optical fiber and compensates wavelength dispersion of a third optical channel signal inputted to said light branching apparatus due to said second optical fiber.

8. (Original) The light branching apparatus according to claim 1, wherein said plurality of optical channel signals are compensated in units of channels, and said first wavelength dispersion compensator includes at least a first wavelength dispersion compensating element for the channel of said first optical channel signal.

9. (Previously presented) An optical communication system comprising:

- a first optical fiber connected to a first station;
- a second optical fiber connected to a second station;
- a third optical fiber connected to a third station; and
- a light branching apparatus, which comprises:

an optical splitter which splits an optical signal for a plurality of channels on said first optical fiber from said first station into at least a first optical channel signal on a first channel of said second optical fiber and a plurality of second optical channel signals on a plurality of second channels of said third optical fiber; and

a first wavelength dispersion compensator on said second optical fiber which is provided for said first channel and compensates wavelength dispersion of said first optical channel signal due to said optical splitter.

10. (Original) The optical communication system according to claim 9, further comprising:

a second wavelength dispersion compensator which is provided for said plurality of second channels and compensates wavelength dispersion of said plurality of second optical channel signals due to said optical splitter.

11. (Original) The optical communication system according to claim 10, wherein said first wavelength dispersion compensator compensates wavelength dispersion of said first optical channel signal due to said second optical fiber, in addition to said wavelength dispersion of said first optical channel signal due to said optical splitter.

12. (Previously presented) The optical communication system according to claim 11, wherein said first wavelength dispersion compensator compensates said wavelength dispersion of said first optical channel signal due to said second optical fiber by a difference in length between said second optical fiber and said third optical fiber on which said first optical channel signal is selectively propagated.

13. (Original) The optical communication system according to claim 12, further comprising:

an optical switch which switches a channel from one of said plurality of second channels to said first channel.

14. (Previously presented) The optical communication system according to claim 9, further comprising:

a third wavelength dispersion compensator which is provided for said first channel and compensates wavelength dispersion of said first optical channel signal due to said second optical fiber.

15. (Previously presented) The optical communication system according to claim 9, further comprising:

a fourth wavelength dispersion compensator which is provided for a third channel of said second optical fiber and compensates wavelength dispersion of a third optical channel signal inputted to said light branching apparatus due to said second optical fiber.

16. (Original) The optical communication system according to claim 9, wherein said plurality of optical channel signals are compensated in units of channels, and said first wavelength dispersion compensator includes at least a first wavelength dispersion compensating element for the channel of said first optical channel signal.

17. (Previously presented) A light branching apparatus comprising:
an optical switch which switches a transmission channel of a first optical channel signal on a first optical fiber from a first channel on a second optical fiber to a second channel on a third optical fiber;
a wavelength dispersion compensator on said second optical fiber which compensates wavelength dispersion of said first optical channel signal due to said second optical fiber by difference in length between said second optical fiber and said third optical fiber.

18. (Previously presented) A light branching apparatus, comprising:
an optical splitter which splits at least a first optical channel signal from an optical signal for a plurality of channels on a first optical fiber to transmit onto a first channel of a second optical fiber; and
a first wavelength dispersion compensator on said second optical fiber which is provided for said first channel and compensates wavelength dispersion of said first optical channel signal due to said second optical fiber.

19. (Previously presented) The light branching apparatus according to claim 18, further comprising:
a second wavelength dispersion compensator which is provided for a second channel of said second optical fiber, and compensates wavelength dispersion of a second optical channel signal supplied on said second channel due to said second optical fiber.

20. (Previously presented) The light branching apparatus according to claim 1, wherein said first wavelength dispersion compensator compensates said wavelength dispersion of said first optical channel signal due to said second optical fiber by a difference in length between said second optical fiber and said third optical fiber on which said first optical channel signal is selectively propagated.

21. (Previously presented) The light branching apparatus according to claim 1, further comprising:

an optical switch which switches a channel from one of said plurality of second channels to said first channel.

22. (New) The light branching apparatus according to claim 1, wherein said first wavelength dispersion compensator comprises a first plurality of dispersion compensator circuits which correspond respectively to a plurality of branch paths which are separated for a plurality of wavelength ranges of said first optical fiber.

23. (New) The light branching apparatus according to claim 22, further comprising:

a second wavelength dispersion compensator which is provided for said plurality of second channels and compensates wavelength dispersion of said plurality of second optical channel signals due to said optical splitter,

wherein said second wavelength dispersion compensator comprises a second plurality of dispersion compensator circuits which correspond respectively to a plurality of branch paths which are separated for a plurality of wavelength ranges of said first optical fiber.

24. (New) The light branching apparatus according to claim 23, wherein said first plurality and said second plurality of dispersion compensators compensate a wavelength dispersion at once on all wavelength ranges of said optical signal for said plurality of channels on said first optical fiber.

25. (New) The light branching apparatus according to claim 24, wherein said first

plurality and said second plurality of dispersion compensators comprise a compensation characteristic which is determined in accordance with a dispersion amount based on a property of said light branching apparatus using an optical signal of a predetermined wavelength as a reference.